Attachment "A"
(Pending Claims)

1-6. (Canceled)

7. (Currently amended) A method for making an electrical component assembly, comprising, in sequence, the steps of:

laminating a film on an active surface of an ~~integrated circuit~~ semiconductor chip;

producing holes in the film to expose contact pads on the active surface of the ~~integrated circuit~~ semiconductor chip;

filling the holes with an electrically conductive material;

placing the ~~integrated circuit~~ semiconductor chip on a substrate with the film located between the ~~integrated circuit~~ semiconductor chip and the substrate; and

reflowing the electrically conductive material in order to attach the ~~integrated circuit~~ semiconductor chip to the substrate.

8. (Original) The method of claim 7 further comprising the step of: coating a surface of the film which faces the substrate with a flux adhesive.

9. (Withdrawn) The method of claim 7 wherein the filling step comprises filling the holes with molten solder.

10. (Original) The method of claim 7 wherein the filling step comprises filling the holes with solder paste.

11. (Currently amended) The method of claim 7 wherein the holes ~~in the encapsulant~~ are produced by laser drilling.

12. (Withdrawn) The method of claim 7 wherein the holes in the encapsulant are produced by plasma etching.

13. (Withdrawn) The method of claim 7 wherein the holes in the encapsulant are produced by chemical etching.

14. (Withdrawn) The method of claim 7 wherein the holes in the encapsulant are produced by photoimaging.

15-18. (Canceled)

19. (Currently amended) A method for making an electrical component assembly, comprising, in sequence, the steps of:

laminating a film on a substrate having discrete solder bumps thereon;

placing an ~~integrated circuit~~ semiconductor chip on a substrate with the film located between the ~~integrated circuit~~ semiconductor chip and the substrate; and

reflowing the solder bumps in order to attach the ~~integrated circuit~~ semiconductor chip to the substrate.

20. (Canceled)

21. (Currently amended) A method for making an electrical component assembly, comprising, in sequence, the steps of:

laminating a film on an active surface of an ~~integrated circuit~~ semiconductor chip having discrete solder bumps thereon;

coating a substrate with a portion of an encapsulant;

placing the ~~integrated circuit~~ semiconductor chip on the substrate with the film and encapsulant portion located between the ~~integrated circuit~~ semiconductor chip and the substrate;

curing the encapsulant portion; and

reflowing the solder bumps in order to attach the ~~integrated circuit~~ semiconductor chip to the substrate.

22. (Currently amended) A method for making an electrical component assembly, comprising, in sequence, the steps of:

laminating a film on an active surface of an ~~integrated circuit~~ semiconductor chip having discrete solder bumps thereon; ~~integrated circuit~~ semiconductor

coating the film with a portion of an encapsulant;

placing the ~~integrated circuit~~ semiconductor chip on ~~the~~ a substrate with the film and encapsulant portion located between

the ~~integrated circuit~~ semiconductor chip and the substrate;

curing the encapsulant portion; and

reflowing the solder bumps in order to attach the ~~integrated circuit~~ semiconductor chip to the substrate.

23. (New) A method for making an electrical component assembly comprising the steps of:

providing a printed circuit substrate having one or more discrete metallized pads thereon;

applying to at least a portion of the printed circuit substrate surface a first portion encapsulant;

producing holes in the encapsulant to expose the metallized pads on the substrate;

filling said holes with solder;

providing a semiconductor chip device having an active surface with a plurality of solderable contact pads thereon, at least one solderable contact pad corresponding to at least one metallized pad on the printed circuit substrate;

disposing a second portion encapsulant comprising a fluxing agent between the semiconductor chip device and the printed circuit substrate;

attaching the semiconductor chip device to the printed circuit substrate to form a combined unit wherein the solder-filled holes face towards and are aligned with their

corresponding solderable pads on the semiconductor chip device and there exists a thin layer of said second portion encapsulant at least between the solder-filled holes and the semiconductor chip device;

wherein said first portion encapsulant comprises a chemical composition selected so as to not adversely affect properties of the second portion, said properties including:

a fluxing agent promoting wetting of the solderable contact pads by the solder;

chemically immobilizing the fluxing agent and flux reaction byproducts after cure;

having a low viscosity during a soldering operation that does not impede flow of molten solder;

resisting corrosion and resisting degradation at soldering temperatures; and

not evolving any gases that can cause voids or bubbles.

24. (New) The method of claim 23 further comprising heating the combined unit up to a temperature that melts the solder and simultaneously softens at least the second portion encapsulant to a low viscosity, maintaining at least the second portion encapsulant at the low viscosity while the solder wets the solderable contact pads.

25. (New) The method of claim 24 further comprising allowing

the melted solder and encapsulant materials to hard n.

26. (New) The method of claim 23 wherein at least the first portion encapsulant comprises a laminated film.

27. (New) The method of claim 23 wherein the holes are filled with solder so that the solder protrudes beyond the surface of the first portion encapsulant.

28. (New) The method of claim 23 wherein the second portion encapsulant is applied to the printed circuit substrate and first portion encapsulant.

29. (New) The method of claim 23 wherein the second portion encapsulant is applied to the semiconductor chip device.

30. (New) The method of claim 23 wherein the first portion encapsulant comprises a polymer having a filler.

31. (New) A method for making an electrical component assembly comprising the steps of:

providing a printed circuit substrate having one or more discrete metallized pads thereon with a plurality of discrete solder bumps such that said one or more metallized pads has a solder bump associated therewith and electrically interconnected

thereto;

applying to at least a portion of the printed circuit substrate surface a first portion encapsulant;

producing holes in the encapsulant to expose the solder bumps on the substrate;

providing a semiconductor chip device having an active surface with a plurality of solderable contact pads thereon, at least one solderable contact pad corresponding to at least one metallized pad on the printed circuit substrate;

disposing a second portion encapsulant comprising a fluxing agent between the semiconductor chip device and the printed circuit substrate;

attaching the semiconductor chip device to the printed circuit substrate to form a combined unit wherein the solder bumps face towards and are aligned with their corresponding solderable pads on the semiconductor chip device and there exists a thin layer of said second portion encapsulant at least between the solder bumps and the semiconductor chip device;

wherein said first portion encapsulant comprises a chemical composition selected so as to not adversely affect properties of the second portion, said properties including:

a fluxing agent promoting wetting of the solderable contact pads by the solder;

chemically immobilizing the fluxing agent and flux reaction byproducts after cure;

having a low viscosity during a soldering operation that does not impede flow of molten solder;

resisting corrosion and resisting degradation at soldering temperatures; and

not evolving any gases that can cause voids or bubbles.

32. (New) The method of claim 31 further comprising heating the combined unit up to a temperature that melts the solder and simultaneously softens at least the second portion encapsulant to a low viscosity, maintaining at least the second portion encapsulant at the low viscosity while the solder wets the solderable contact pads.

33. (New) The method of claim 32 further comprising allowing the melted solder and encapsulant materials to harden.

34. (New) The method of claim 31 wherein at least the first portion encapsulant comprises a laminated film.

35. (New) The method of claim 31 wherein the solder bumps protrude beyond the surface of the first portion encapsulant.

36. (New) The method of claim 31 wherein the second portion encapsulant is applied to the printed circuit substrate and first portion encapsulant.

37. (New) The method of claim 31 wherein the second portion encapsulant is applied to the semiconductor chip device.

38. (New) The method of claim 31 wherein the first portion encapsulant comprises a polymer having a filler.